Rectangle Links with Wubbers Parallel Mandrel Pliers

by Patti Bullard, Ph.D.

Making your own chain opens up a lot of new design possibilities, and guess what? It is no longer tedious! This tutorial is about the mechanics of forming rectangle links. For information on fusing Argentium® Sterling Silver, adding texture to your creations, and finishing techniques, be sure to check out the other Wubbers University tutorials.

Using 14-gauge dead soft Argentium® Sterling Silver, roll the wire around the jaws of the Wubbers Rectangle Parallel Pliers (8 x 4mm), forming about 4-6 links at a time. You can saw the links, but a good alternative would be to cut the links while the coil of wire is still on the jaws of the pliers with a pair of Lindstrom shears.

You will notice that the links are not perfectly squared at this point, but that's OK because that can easily be done with the Wubbers Rectangle Parallel Pliers after fusing or soldering the links.

The Lindstrom shear will most often leave an angled cut. As long as the link closes well, the angle will not cause a problem. When using 18- or 20-gauge wire, the link will close very well. However, when using 16- and especially 14-gauge (as shown above), there is often a small v-shaped divot missing from the wire. When working with Argentium® Silver, then often the small divot will not be noticeable after fusing, hammering, and texturing the link. However, sometimes it helps to "clean up" the cut ends of the wire.

One method that can be used to get a more perfect closure is to clip the ends flush using a good heavy-duty flush cutter. Just a small amount of wire will need to be removed, requiring just a quick clip of a tiny point off the tip of the wire.

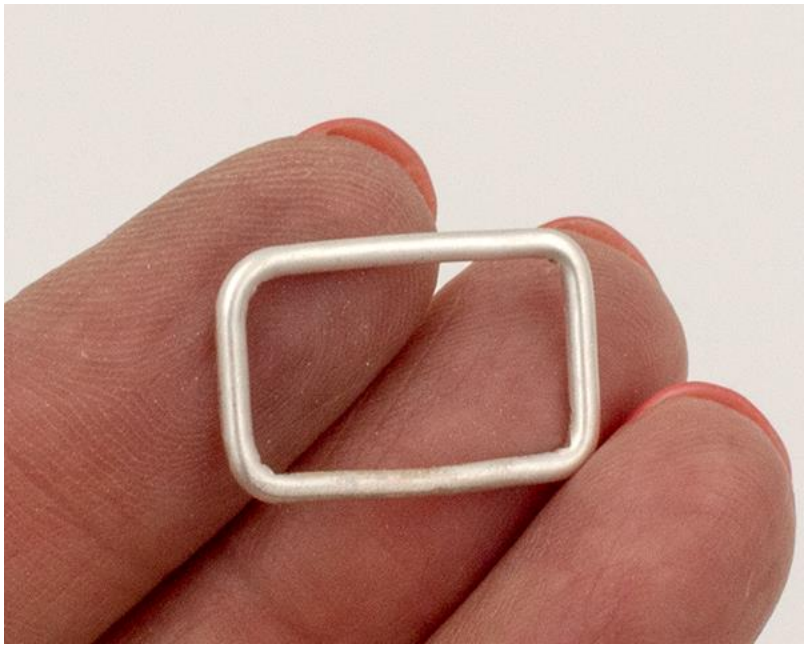
My favorite way to clean up the cut ends of the wire is to use a cutting disk. After closing the link to get the ends lined up with each other, open the link slightly so that the cutting disk easily fits into the opening. When using lighter gauge wire, I squeeze the ends together so that they both touch the cutting disk at the same time, creating the perfect join. Heavy gauge wire is harder to manipulate. Holding the cutting disk at a 90-degree angle to the wire, touch one end of the wire, then the other. With a little practice, this method will work perfectly for heavier-gauge wire.

The link has now been fused. Time to get it all squared up!

Because only a small space is needed for the wire, use the bolt to set about a ¼" space between the jaws of the pliers. This will make closing the jaws easier on your hands. Simply place a narrow end of the link deep in the jaw of the pliers for maximum leverage. Give a squeeze to flatten that end of the link. Repeat on the opposite end. Check to make sure that the two narrow ends are parallel to each other, adjusting as needed.

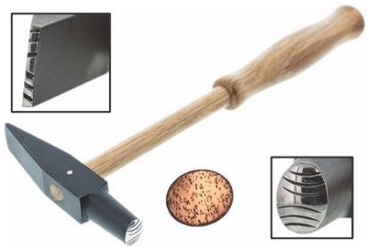
Turn the link to square and straighten the longer sides. Start by squaring each corner of the link, then moving toward the center.

Helpful tip: When I am doing a number of links and just happen to have the larger 12 x 6mm Rectangle Parallel Pliers handy, I use them to flatten the longer side of the rectangle. I often use this pair of pliers to flatten metal—they have the broader jaw and even greater leverage.



The link is now ready for adding the texture and finish of your choice.

The links in this bracelet were flattened with a domed and polished chasing hammer, then textured using the Wubbers Oval Artisan's Mark Texture hammer. The box clasp was made using the Wubbers 8 x 4mm Rectangle Parallel Pliers. The jump rings joining the links are 18-gauge, 4.0mm Argentium® Sterling Silver jump rings.



Wubbers Oval Artisan's Mark Texture Hammer